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EVIDENCE IS CITED TO DISPUTE THE BELIEF THAT MORE TEACHER EDUCATION AUTOMATICALLY LEADS TO GREATER PUPIL ACHIEVEMENT. SOME STUDIES HAVE SHOWN LITTLE OR NO RELATIONSHIP BETWEEN TEACHER KNOWLEDGE AND PUPIL ACHIEVEMENT IN ELEMENTARY SCHOOL SUBJECT MATTERS, AND BETWEEN THE AMOUNT OF PREPARATION A TEACHER HAS HAD ALSO HAS VERY LITTLE EFFECT ON PUPIL ACHIEVEMENT. SIMILAR FINDINGS FOLLOWED WHEN SUPERVISORY PERSONNEL ASSESSED TEACHER PERFORMANCE. HOWEVER, THESE STUDIES USED LARGELY WHITE SCHOOL POPULATIONS, AND SOME EVIDENCE SUGGESTS THAT RELATIONSHIPS BETWEEN PUPIL ACHIEVEMENT AND THUSE TEACHER VARIABLES MAY BE SLIGHTLY STRONGER FOR NEGRO STUDENTS, ALTHOUGH STILL NOT POTENT ENOUGH TO MAKE A MAJOR DIFFERENCE IN PUPIL ACHIEVEMENT. IT IS CONCLUDED THAT WHAT IS NEEDED TO HELP THE NEGRO IS NOT MORE TEACHER EDUCATION BUT A COMPLETE RESTRUCTURING OF THE EDUCATIONAL AND SOCIAL ENVIRONMENT OF THE CHILD, HIS FAMILY AND PEERS. THIS WOULD INVOLVE PROVIDING A STIMULATING SCHOOL ENVIRONMENT FOR THE CHILD, DAY-CARE FACILITIES, AND THE INTIMATE INVOLVEMENT OF PARENTS, TEACHERS, AND THE COMMUNITY IN THE PLANNING AND IMPLEMENTATION OF PROGRAMS FOR THEIR CHILDREN. (AW)

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THE TEACHER PREPARATION MYTH: A PHOENIX TOO FREQUENT

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A recent symposium at the Harvard Graduate School of Education on the Equality of Educational Opportunity report of 1966 highlighted one of the most controversial and misunderstood problems in education - the relationship between teacher preparation and pupil achievement. Professor Samuel S. Bowles, a Harvard economist, disputed one of the report's conclusions that teacher variability affected pupil learning less than other environmental and social factors. He claimed that his analysis of the report's data indicated that raising the educational level of teachers of Negro children by one year would result in halving the present disparity in achievement scores between Negro and white pupils. Professor James Coleman of Johns Hopkins University, the director of the study, challenged this. He claimed that no one knows enough about teachers' performance to be able to predict the effects of longer teacher preparation on pupil achievement. A review of educational research literature reveals a large probability

of error in both these positions. Raising the educational level of teachers is likely to have little effect on pupil achievement and there is enough research on teacher performance to document this.

The logical basis for this faith in more teacher education leading to greater pupil achievement seems to lie in the premise that longer education leads to more knowledgeable teachers who are therefore better equipped to impart this knowledge to their students. Assuming that more education will result in additional teacher erudition, will pupil achievement reflect this?

Railsback (9) found that there was little or no connection between teacher knowledge and pupil achievement in elementary school subject matter areas. This finding was supported in studies by Watts (17) and Washburne and Heil (16). Research by Bassham (3), Moore (8), and Smail (11) bearing on the relationship between teacher mathematical competence and pupil achievement in arithmetic found little relationship between the two, with some indication in the Bassham (3) study that only pupils above the class mean in intelligence quotient scores are likely to significantly benefit from greater teacher knowledge. These studies, although concerned with elementary education, are indicative of the strong research trend showing a weak or non-existent relationship between teacher academic attainment and pupil achievment at all levels. Research reviews by Auerbach (2) and Hoyt (5) confirm this.



Although teacher achievement does not seem to be related to pupil achievement, it might still be thought possible that additional educational preparation, not necessarily measurable by increased scores on subject matter tests, might result in greater pupil gains. This possibility was examined in research correlating pupil gains with the extent of teacher preparation. Watts (17), in a study of 466 elementary teachers and their pupils in 13 school systems, found no significant relationship between pupil achievement and their teachers' training regardless of whether that training was measured by degrees earned, time spent in training, or recency of educational training. A congruent finding relative to graduate study or additional preparation characterized Frederickson's (4) study of of elementary teachers in Florida. The Soper (13) study of 128 teachers in New York State indicated that extra preparation by means of inservice education was as ineffective as preservice training has been in securing pupil academic success.

An article by McCall and Krause (7), based on McCall's exceptionally thorough North Carolina study relating pupil gain to teacher characteristics and other variables, buttressed the previously cited studies verifying the almost complete lack of relationship between teacher training and pupil growth.

Ackerman (1), in his review of research studies using pupil gain as the major criterion, concluded that teacher training in subject matter was not an important factor in



elementary education and only important in highly technical areas in secondary education. Since it is usually only the more capable students who elect these fields (i.e. advanced courses in mathematics, physics, chemistry, etc.), this tends to corroborate the Bassham (3) observation that it is the brighter student who most benefits academically from interaction with teachers having superior subject matter competency.

The plain fact is that there is not a single study that, after equating for pupil intelligence and socio-economic status, has found the length of teacher preparation variable to be even peripherally related to pupil gain, let alone being of major importance in this aducational outcome.

If one feels that the pupil growth criterion of teacher effectiveness is too narrow a definition of teaching efficiency and prefers looking to experienced supervisory personnel to assess teacher performance, the relationship of this criterion to the teacher's educational background extends the already obvious pattern of irrelevancy. Typical of the research on this topic are dissertations by Smith (12), Kleyle (6), and Vail (15). Their findings of no significant relationship are supported by similar findings by Ryans (10) based on a study of 275 teachers and a Standlee and Popham (14) investigation of 888 teachers. Regardless of what criteria are used, the irrelevance of the amount of teacher training to



teaching success becomes increasingly evident the more one consults the pertinent research.

A limiting factor in all these studies is that they were largely based on white school populations. The <u>Equality</u> of <u>Educational Opportunity</u> report indicates that the teacher variable may be a little more important for the Negro than the white students. Considering the negligible relationship between teacher preparation and pupil achievement among the white population, it is extremely unlikely that any slightly stronger relationship for Negro pupils would even approach the halving of the achievement differential between the two groups, as claimed by Professor Bowles. There would have to be a fantastically high correlation between teacher education and Negro pupil achievement for this disparity reduction to occur. There is little empirical or experimental evidence to signify such a correlation exists.

Is there, then, no hope of increasing the academic achievement of underachieving minority group pupils?

There is hope, but it does not rest in the "All we really need is better teacher preparation," myth. This misapprehension leads to such ingenuous non-solutions as requiring additional courses in "urban sociology" which show little reason to expect the students to get more from them than another three credit hours toward their degree. It also leads to the exposure of prospective teachers to student teaching in ghetto areas - an



increasingly common practice totally without promise insofar as solving the problems of undereducation in urban areas is is concerned. What have the students to gain from watching and participating in failing programs and failing practices? And if there were enough successes to watch and model themselves after, how come the problem not only continues to exist but seems to be getting worse?

The answer to the challenge of obtaining pupil academic growth in urban poverty enclaves will depend on nothing less than a complete restructuring of the educational and social environment of the child, his family, and his peers. It will call for the school to provide a stimulating environment for each child from the age of two or three, on a complete day-care basis, with his parents intimately involved in this process. The parents will have to be trained and paid as partners of the teacher in this enterprise and they will have to take an active part in the planning and implementation of programs affecting their children. The teacher would then be a coordinator and director of learning experiences which would be planned for parent and community personnel to engage in with children.

Under these conditions, the training of teachers to perform their new functions becomes an important matter. Under present social and educational conditions, no possible training can lead to success in an impossible situation.

It is high time the burden of remedying educational deprivation resulting from societal deficiencies was taken off the teachers' shoulders alone and placed where it belongs - in the hands of the entire community.



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